Dkt. No. 25363A

REMARKS

Applicant presents this Amendment document responsive to the Advisory Action mailed September 20, 2007, along with a Request for Continued Examination. In light of the following remarks, Applicant respectfully requests reconsideration of the final rejections made in the Office Action mailed July 16, 2007.

The final Office Action includes a rejection of claims 10 and 20 as allegedly failing to comply with the definiteness requirement of Section 112, second paragraph. In support of these rejections, it is contended that "[i]t is not clear what heat resistance is encompassed by a 'high heat resistance.'" According to the Examiner, "[t]he phrase is indefinite because the phrase has a different meaning to different individuals based on different interpretations."

Respectfully, that is not the proper test. Rather, "[a]cceptability of the claim language depends on whether one of ordinary skill in the art would understand what is claimed, in light of the specification." MPEP 2173.05(b). Accordingly, it does not matter if the phrase, when read in a vacuum, might have a "different meaning to different individuals based on different interpretations." Instead, it matters whether a skilled artisan would fail to understand what is claimed upon reviewing Applicant's specification, which has not been established.

In making the rejection final, the Examiner contends that Applicant failed to provide a definition of what "high heat resistance" means. Respectfully, as evidenced by the MPEP section cited above, it is not necessary for the Applicant to provide a definition in order for a claim term to be definite, since the meaning that would be understood based on the specification is controlling. Moreover, the Examiner's contention that the term "high heat resistance" is "subjective" is irrelevant. That an interpretation of claim terminology involves the subjective understanding of a skilled artisan based on the teachings of the accompanying specification does not render it indefinite.

The Examiner's position also flies in the face of numerous issued patents claiming "high heat resistance," such as U.S. Patent No. 7,165,677 (Claim 12 - "a film or paint having ***high heat resistance*** is provided"); U.S. Patent No. 7,161, 125 (Claim 1 – "wherein said transfer mechanism is formed of a material that does not have ***high heat-resistance*** and fire-resistance"); and U.S. Patent No. 7,138,610 (Claim 12 - wherein the at least one heat insulating member is made of glass material or ceramic material having a ***high heat resistance***"). These are but a few examples of the hundreds of issued patents having the same limitation used by the Applicant to

describe its invention. In light of the foregoing and the teachings in the Applicant's specification as to how high heat resistance may be achieved, reconsideration of the rejections of claims 10 and 20 under Section 112 of the Patent Act is respectfully requested.

Turning to the rejection of claim 25, Applicant challenged the Examiner's purported factual finding that either U.S. Patent No. 5,616,408 to Oleszczuk or U.S. Patent No. 5,804,512 to Lickfield discloses the exact same invention claimed. Rather than properly supporting the rejection based on the requisite substantial evidence that these references disclose the identical invention, the Examiner takes the position for the first time in the final Action that Applicant's alleged "failure" to differentiate the references constitutes an admission that the terms of claim 25 are met.

Applicant respectfully disagrees, both with the correctness of the anticipation rejections and the alleged admission that the invention of claim 25 is anticipated. In making these rejections, the Examiner **never** establishes that either cited reference discloses the three claimed layers, but rather arbitrarily and capriciously speculates that a single mass of fibers can be considered as a "multi-layered article" (despite having taken precisely the opposite position in a prior Action; see Office Action dated July 11, 2005, p. 3, para. 5, lines 4-5, wherein the Examiner admitted that "**neither Oleszczuk nor Lickfield specifically mentions a third layer of wet processed mat**") (emphasis added). Accordingly, a *prima facie* case of anticipation was lacking by the Examiner's own admission.

In such case, the burden cannot be shifted to the Applicant to prove **anything**. *Hyatt v. Dudas*, 492 F.3d 1365, 83 USPQ2d 1373 (Fed. Cir. 2007) ("in order to . . . place the burden on the applicant, the PTO must first establish a prima facie case for the rejection."). Rather, the burden of establishing a proper rejection based on substantial evidence remains on the Examiner, and an alleged absence of distinguishing remarks cannot possibly be considered an admission that the terms of a claim are met. Accordingly, Applicant rejects as improper the Examiner's attempt to characterize a challenge to the rejection made as an admission that its claimed inventions are unpatentable, when in fact the argument presented is precisely to the contrary.

The Examiner also makes final the rejections of claims 1-5, 11, 12, and 25 as anticipated by U.S. Patent No. 6,022,818 to Welchel et al. ("Welchel"). In making the rejections, the Examiner admits that Welchel discloses air-laid mats. Rather than relying solely on the speculative statement made in the previous Action that the mat of Welchel "is identical to or only

slightly different from the claimed article (wet-laid)," it is now posited that it is "well known to one skilled in the art" that "wet laid mat and air-laid mats both consist of fibers having random orientation and isotropic properties." (Final Office Action, p. 16, second paragraph).

Again, however, no evidence whatsoever in the record supports this statement, let alone the requisite substantial evidence. Of course, unsupported arguments are no substitute for objective evidence. No such evidence establishes that an air-laid mat is "identical to or only slightly different from" the claimed wet processed mat layers, or what is "well known" to a skilled artisan in the mind of the Examiner. Accordingly, withdrawal of the anticipation rejections based on Welchel is respectfully requested.

In an effort to substantiate these rejections despite the lack of objective evidence on key supporting points, the Examiner asserts "the patentability of a product does not depend on its method of production." This position is maintained, despite the holdings of precedential decisions cited by the Applicant in prior Actions supporting that a "wet processed mat" refers to a product *per se,* and does not recite any method or process steps. *See 3M Innovative Props. Co. v. Avery Dennison Corp.*, 350 F.3d 1365, 1371-74 69 USPQ2d 1050 (Fed. Cir. 2003) (holding that "multiple embossed patterns" did not import a process limitation into a structural claim); *Hazani v. U.S. International Trade Commission*, 44 USPQ2d 1358 (Fed. Cir. 1997) (holding that the limitation "chemically engraved" in a claim "describes the product more by its structure than by the process used to obtain it."); *In re Garnero*, 412 F.2d 276, 278-79, 162 USPQ 221, 223 (CCPA 1969) (". . . the recitation of the particles as 'interbonded one to another by interfusion between the surfaces of the perlite particles' is as capable of being construed as a structural limitation as 'intermixed,' 'ground in place,' 'press fitted,' 'etched,' and 'welded,' all of which at one time or another have been separately held capable of construction as structural, rather than process, limitations").

Disregarding this precedent, the Examiner again cites *In re Marosi* 218 USPQ 289 (Fed. Cir. 1983), which Applicant distinguished in the prior response, and continues to assert that the present claims are "product-by-process" claims (which allegedly justifies shifting the burden of proving patentability to the Applicant). However, the present claims recite a liner/insulator having multiple layers of wet processed mat directly bonded together. Thus, the claims at issue are not "product-by-process" claims at all, but rather recite products in structural terms (claims 1-12 and 24-25) or methods of manufacture (claims 13-23).

With respect to the important structural distinctions between a wet processed mat and air-laid mats, the Examiner contends that Applicant's argument is "not persuasive because the current claims do not refer to weight per unit area and because Welchel discloses that air-laid mats possess randomly deposited fibers." This contention misses the point for several reasons.

First of all, it does not matter that the claims omit an explicit recitation of the advantages of the claimed wet processed mats for purposes of an anticipation rejection. Welchel by the Examiner's own admission does not disclose the claimed wet processed mat and, in fact, is completely silent with respect to such. Applicant's argument cited to **evidence** in the record (namely, the specification made under sworn declaration) establishing a patentable distinction between the structures recited in the claim and the prior art. Noteworthy, the Examiner cited nothing countervailing Applicant's assertion, and instead simply speculates that the properties of air laid and wet laid mats are "well known" (a point which is frankly irrelevant, since even if wet processed mats are "well known," this does not and cannot mean that they are disclosed in Welchel, as required for a proper anticipation rejection).

Likewise, the statement that "Welchel discloses that air-laid mats possess randomly deposited fibers" is irrelevant. Again, Applicant's claims recite directly bonded layers of wet processed mat found nowhere in Welchel. Even if the structure disclosed in Welchel possesses randomly deposited fibers, it does not follow that it is therefore a wet processed mat that anticipates the claimed inventions. This is akin to saying an apple is an orange because both have seeds!

Applicant further requests reconsideration of the final rejections of claims 1-5, 9-15, 19-22, and 24-25 based on the combination of Oleszczuk et al. and Lickfield et al. as primary references, in further view of Welchel. In making these rejections, the Examiner "admits that layers (14) and (16) are not directly bonded," but nonetheless concludes that one of these layers "would be directly bonded to another layer of wet processed mat" (final Office Action, p. 17, ¶3). Absolutely no evidence in the record supports this conclusion. Olezczuk et al. and Lickfield et al. do **not** in any of the passages cited disclose that an additional "wet processed mat" layer may be added to the article, let alone **directly bonded to another wet processed mat layer** as required by the claims at issue. While these references include an omnibus statement regarding the possible addition of unspecified layers in an unspecified manner, this hardly qualifies as the requisite substantial evidence necessary to support a proper obviousness

rejection. *See In re Zurko*, 59 USPQ2d 1693 (Fed. Cir. 2001) (recognizing the need for "some concrete evidence in the record in support of" findings of obviousness). Stated another way, no "reasonable mind might accept as adequate" the teachings of Olezczuk et al. and Lickfield et al. as to the addition of various additional layers as supporting the conclusion advanced by the Examiner that it would as a result of the cited teachings be obvious to directly bond a wet processed mat of a different fiber formulation to either of the layers 14, 16 disclosed in these references.

Likewise, the requisite substantial evidence does not support the ultimate conclusion reached as to the obviousness of the claimed inventions. The Examiner concludes based on the teachings of the cited references that a skilled artisan would have found it obvious to "directly bond an additional wet processed bicomponent staple fiber mat supporting layer, with a different fiber formulation . . . because the additional wet processed bicomponent staple fiber mat supporting layer would allow the surface to be more aesthetically pleasing to the touch and more comfortable to the user" (final Office Action, p. 6). The difficulty with this position is that no evidence in the record supports the conclusion that adding a wet processed mat layer having a different fiber formulation would produce the stated result. As implicitly admitted by the Examiner, Welchel does not mention any wet processed mat layer directly bonded to another wet processed mat layer of the type claimed having a different fiber formulation, so it cannot support the conclusion reached. Moreover, the Examiner expressly admits that Olezczuk et al. and Lickfield et al. "do not appear to specifically mention at least one adjacent additional layer of different fiber formulation" (*Id.* at p. 5). The Examiner's conclusion is thus a *non sequitur,* since the fact that Welchel teaches that a different fiber diameter or denier may create a surface more "aesthetically more pleasing to the touch" would not in any way provide a reason for a skilled artisan to directly bond two wet processed mats having different fiber formulations together as required by the claim.

Turning to method claim 13 alone, it specifically requires the step of "applying sufficient heat and pressure to said first and second layers of mat to bond said first layer and said second layer directly together and form said liner/insulator." As admitted by the Examiner, the primary references do not in any way teach directly bonding layers of wet processed mat, as claimed. Hence, they cannot possibly teach the step of "applying heat and pressure" to two such layers in order to bond them.

In response, the Examiner disagrees, stating that "Oleszczuk and Lickfield each disclosed that the layers may be thermally bonded." Respectfully, these references fail to mention a liner/insulator including first and second layers of wet processed mat directly bonded together, wherein the first and second layers have different fiber formulations. Accordingly, even if the teachings of these references are combined with Welchel, which fails to disclose the claimed wet processed mat with layers having different fiber formulations, they would in no way disclose all limitations of process claim 13, as required for a *prima facie* case of obviousness. *See* MPEP 2143.03 ("To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.").

With regard to claims 6-8 and 16-18, Oleszczuk et al. and Lickfield et al. fail to mention a liner/insulator including first and second layers of wet processed mat directly bonded together, wherein the first and second layers have different fiber formulations. Welchel, as described above, does not supply this missing teaching, either, and Insley does nothing to address this shortcoming of the other references. Also, the Examiner's stated reason for making the combination ("successfully practicing the invention") is mere argument, and does not qualify as objective evidence of the requisite reason for arriving at the claimed inventions. Accordingly, a *prima facie* case of obviousness is lacking with respect to claims 6–8 and 16–18.

As for claim 23, which stands rejected as obvious based on the teachings of **five** different references, the Oleszczuk, Lickfield, and Welchel references fail to teach or suggest a liner/insulator including first and second layers of wet processed mat directly bonded together where those first and second layers have different fiber formulations. Bansal and Malaney do nothing to address this shortcoming of the other references. Accordingly, claim 23 patentably distinguishes over the cited art and should also be allowed.

As for dependent claim 24, the Examiner contends that its terms are met by the three references cited against claim 1, contending that the "ordinary meaning" of the word "composition" is "general makeup." No evidence cited by the Examiner supports this broad definition, or establishes that it is consistent with the meaning that would be understood by a skilled artisan. *See In re Cortright*, 165 F.3d 1353, 1358, 49 USPQ2d 1464 (Fed. Cir. 1999) ("Although the PTO must give claims their broadest reasonable interpretation, this interpretation **must be consistent with the one that those skilled in the art would reach**.") (emphasis added). Rather, as demonstrated by **evidence** cited by the Applicant and the present

specification, "composition" would be understood to mean that the fibers have not merely a different size, but rather comprise different elements or compounds. Accordingly, the Examiner's attempt to characterize the Applicant's arguments as being "unsupported" by evidence lacks merit.

The Examiner in the final Action further makes the curious contention that claim 24 "simply states that the layers have different fiber compositions, not **necessarily different from each other**" (Office Action, paragraph bridging pp. 21-22, emphasis added). The exact wording of claim 24 is that "the first and second layers have different fiber compositions." Using the Examiner's interpretation of claim 24, the layers are "not necessarily different from each other," which is in stark and total contrast to the plain language used. The Examiner offers no support whatsoever for the proposed claim construction, and instead improperly construes the claim so as to alter the ordinary meaning of the word "different" to mean "the same." This is not only contrary to logic, but also contrary to what would be understood by a skilled artisan. *See In re Cortright, supra.*

Claims 1-5, 11-15, 21-22, and 25 are further rejected as obvious in light of Welchel "in view of anyone of" Holm, Cederblad, or D'Acchioli. While it is admitted that the primary Welchel reference does not disclose the claimed wet processed layers of mat directly bonded together, the secondary references purportedly disclose "that it is known in the art to form mats by a wet-laid or dry-laid process." Based on this teaching, the Examiner posits that it would have been obvious to make the claimed mats "from any suitable nonwoven material, such as dry laid or wet laid, because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability and desired characteristics" (final Office Action, p. 11).

In an effort to support the rejection, the Examiner cites to several dated decisions allegedly supporting the contention that "[t]he substitution of known equivalent structures involves only ordinary skill in the art" (final Office Action, p. 23, first full paragraph). The first decision, *In re Fout*, 675 F.2d 297, 301 (C.C.P.A. 1982), held that an "[e]xpress suggestion to substitute one equivalent for another need not be present to render such substitution obvious." Hence, it does not appear to stand for the broad proposition of law being advanced by the Examiner. The same is true of the second decision cited, which merely provides that: "[t]he issue of obviousness is not determined by what the references expressly state but by what they

would reasonably suggest to one of ordinary skill in the art." *In re Siebentritt*, 54 C.C.P.A. 1083, 1085 (C.C.P.A. 1967). The final decision, *In re Ruff*, 118 USPQ 343 (CCPA 1958), was decided long before the landmark decision of the U.S. Supreme Court in *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (U.S. 1966), the viability of which was recently affirmed in *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 82 USPQ 1385 (U.S. 2007).

Even if these holdings control (which is doubtful), the problem is that nothing in the record establishes that air laid and wet processed mats are "known equivalent structures." Applicant claims multiple layers of wet processed mat directly bonded together, and the primary reference relied upon (Welchel) teaches an air-laid mat. Holm, Cederblad, or D'Acchioli do not even remotely disclose or teach multiple layers of wet processed mat directly bonded together made of the claimed thermoplastic polymer staple fibers and thermoplastic bicomponent fibers, or that such fibers when wet processed would be suitable for forming a multi-layered insulator. Indeed, an expressly stated goal of the Holm patent is to produce an article of natural fibers (see col. 1, lines 66-67), so it actually teaches away from the arrangement of Welchel. For these reasons, the Examiner has failed to establish the "known equivalence" of wet processed and air laid mats, as well as to set forth a *prima facie* case that it would be obvious to arrive at the claimed inventions based on the cited combination of references.

In attempting to refute Applicant's arguments that the Holm reference "teaches away" from the claimed invention, the Examiner asserts that "the rejection does not suggest using the fiber material disclosed by Holm." Regardless, a reference must be considered "as a whole," including any portion that would lead a skilled artisan away from the claimed invention. MPEP § 2141.02 (prior art must be considered in its entirety, including disclosures that teach away from the claims). In making the rejection, the Examiner cannot simply disregard that Holm disparages the use of thermoplastic fibers, and would therefore lead a skilled artisan in a direction away from the Applicant's invention. *See, e.g. In re Gurley*, 27 F.3d 551, 553, 31 USPQ2d 1130 (Fed. Cir. 1994) ("A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be . . . led in a direction divergent from the path that was taken by the applicant.").

A secondary reason that a *prima facie* case of obviousness is lacking is the complete and total failure of the Examiner to identify any evidence of a **reason** for using the product of Holm, Cederblad, or D'Acchioli in the arrangement of Welchel. Evidentiary support for a reason for

the combination is undoubtedly still a requirement of a *prima facie* case of obviousness. *See* Memorandum of Margaret A. Focarino, Deputy Commissioner for Patent Operations, May 3, 2007 ("in formulating a rejection under 35 U.S.C. 103(a) based upon a combination of prior art elements, **it remains necessary to identify the reason why a person of ordinary skill in the art would have combined the prior art elements in the manner claimed** . . .") (emphasis added). The mere incantation of a passage from "KSR v. Teleflex" by the Examiner cannot sustain the rejection, where a reason for combining the teachings of the references is lacking (and in fact is contraindicated). Indeed, the Supreme Court's decision in *KSR* actually supports the Applicant's position, since it recognizes that the present Examiner's effort to "merely demonstrat[e] that each of its elements was, independently, known in the prior art" is insufficient to establish obviousness. *See KSR Int'l Co. v. Teleflex, Inc., supra* at 1741 (holding that in formulating a rejection under 35 U.S.C. 103(a), it was "important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements" and further stating that "**a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art** . . . .") (emphasis added).

As for the obviousness rejection of claim 25, Applicant stated in the prior response that Welchel does not disclose any third layer of bicomponent fibers, period, and indeed specifically teaches that one of the layers must consist solely of cellulosic fibers in order to be absorbent (see col. 4, lines 36-39). The Examiner disagrees, citing to two passages and Figure 2 of Welchel. The first cited passage at col. 5, lines 35-65, states in its entirety as follows:

> Another embodiment of the composite is shown in FIG. 2 of the drawings. In this configuration, the composite 100 is formed from three layers of material including the same top sheet 102 and a bottom sheet 104 as in FIG. 1 and a second top sheet 105 disposed on a side 107 of the top sheet 102 which is opposed to the bottom sheet 104. As with the previous embodiment, the top sheet 102 is formed from a layer of matrix fibers, **the bottom sheet 104 is formed from a layer of absorbent fibers** and the second top sheet 105 is formed from a fibrous nonwoven web which may include matrix fibers. **An advantageous embodiment is where the top sheet 102 and the second top sheet 105 contain bicomponent matrix fibers so that they can be subjected to a heating process to bond the two sheets together**. The fibers of the top sheet 102 and the bottom sheet 104 are entangled together in the same manner as described above. As with the embodiment shown in FIG. 1 and described above, due to the entangling of the fibers from the bottom sheet 104 into the top sheet 102, region 106 will contain essentially matrix fibers. Region 108 will be a mixture of absorbent fibers and

> nonwoven matrix fibers and region 110 will contain essentially absorbent fibers. In addition, there will be yet a third region 114 formed by the second top sheet 105 which will also contain essentially matrix fibers. These matrix fibers may be the same as or different than the matrix fibers in region 106 or they may be a blend of matrix fibers.

(emphasis added). Nowhere does this passage describe any third layer of bicomponent fibers, nor does it even state that the top sheets 102, 105 comprise **both** thermoplastic polymer staple fibers and thermoplastic bicomponent fibers. The same is true of the passage at column 7, lines 4-21 (which actually prefaces a statement that teaches away from wet processing using bicomponent fibers at col. 7, lines 36-40: "The best method . . . when using bicomponent staple fibers is to use a through-air bonder such as is described above with respect to the bicomponent spunbond web formation process."). Figure 2 does nothing to supplement this teaching in the Examiner's favor, either.

The Examiner cites to Holm, Cederblad, or D'Acchioli in making further obviousness rejections of claims 6-8, 16-18, 19, 20, 23, and 24 in combination with Welchel, Insley, Bansal, Malaney or Lickfield, as previously applied in rejecting these same claims as "obvious." However, these rejections are simply the same rejections made elsewhere without reference to Holm, Cederblad, or D'Acchioli, and simply restated under a different heading. Holm, Cederblad, or D'Acchioli are never mentioned for any reason in the Examiner's formulation of a position regarding *prima facie* obviousness of these claims. Since Applicant addressed and overcame the primary rejections made, and Holm, Cederblad, or D'Acchioli do not in any way supply the missing teachings (a point with which the Examiner seems to agree, since these references are not at all used as evidence in the rejections), it is believed that a *prima facie* case of obviousness is lacking for the reasons provided above, and withdrawal of these rejections in order.

Finally, Applicant presents new claims 26 and 27 for consideration. Claim 26 reads on a liner/insulator comprising first and second **individual layers** of wet processed mats comprising thermoplastic polymer staple fibers and thermoplastic bicomponent fibers of different fiber formulations. A first face of the first layer contacts a second face of the second layer. Support for this claim is found in the specification, including in Figure 1 of the drawings.

Claim 27 reads on a method of producing a wet processed liner/insulator comprising the steps of wet processing thermoplastic polymer staple fibers and thermoplastic bicomponent

Dkt. No. 25363A

fibers to form first and second layers of wet processed mat of different fiber formulations. The method further includes applying sufficient heat and pressure to bond the layers and form the liner/insulator. Support for this claim is found throughout Applicant's specification, including in paragraphs 20, 28, and 29, as well as in Figure 1.

As noted above and by the Examiner's own admission, none of the cited references disclose individual layers of wet processed mats comprised of different formulations in contact or bonded to one another. Accordingly, claims 26 and 27 are believed to be allowable.

Upon careful review and reconsidcration, it is believed the Examiner will agree with the proposition that all claims are directed to patentable subject matter. Accordingly, the issuance of a formal Notice of Allowance is earnestly solicited. Any fees required in connection with this submission may be debited to Deposit Account 50-0568.

Respectfully submitted,

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